

PROBLEM TO BE SOLVED: To provide a method for producing a tube made of oxide dispersion-strengthened ferritic steel by which intermediate heat treatment between cold rolling stages is performed without causing the formation of recrystallized structure and at a relatively high temperature to sufficiently

soften the steel with the result that the cold rolling in the following stage can effectively be performed and the occurrence of cracks in the following cold rolling stage can be prevented.

SOLUTION: A stock is produced by the mixing and sintering of metal powder and oxide powder, and is repeatedly subjected to cold rolling and heat treatment three or more times in total so as to be formed into a tube with a required shape. In this case, each intermediate heat treatment between the rolling is performed by two stage heat treatment where the first heat treatment is performed at a heat treatment temperature of $\leq 1,100^{\circ}\text{C}$, and the second heat treatment is performed at a heat treatment temperature of 1,100 to $1,250^{\circ}\text{C}$ higher than that in the first one, and the final heat treatment is performed at $\geq 1,100^{\circ}\text{C}$. The preferable oxide dispersion-strengthened ferritic steel comprises, by mass, 11 to 15% Cr, 0.1 to 1% Ti and 0.15 to 0.35% Y_2O_3 .

COPYRIGHT: (C) 2004, JPO